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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

DEC 16 2010

Bradford Manning, Director
Environmental Health and Safety
University of New Hampshire
Perpetuity Hall
11 Leavitt Lane
Durham, New Hampshire 03824-3522

Re: Risk-Based PCB Cleanup and Disposal Approval under
40 CFR § 761.61(c) and § 761.79(h)
Field House, Durham, New Hampshire

Dear Mr. Manning:

This is in response to the University of New Hampshire (UNH) Notification¹ for approval of a proposed PCB cleanup at the Field House (the Site) located at 145 Main Street, Durham, New Hampshire. The Site contains PCB caulk that exceeds the allowable PCB levels under the federal PCB regulations at 40 CFR § 761.20 and § 761.62. PCBs concentrations also have been identified in building masonry which exceed the allowable PCB levels for unrestricted use under 40 CFR § 761.61(a).

UNH has requested an approval to address PCB contamination at the Site under 40 CFR § 761.61(c). UNH is proposing the following activities under this project:

- Removal and off-site disposal of all exterior and interior PCB caulk from 25 windows;
- Removal and off-site disposal of the 25 window units as a greater than or equal to (\geq) 50 parts per million (ppm) PCB waste;
- Encapsulation of PCB-contaminated exterior and interior masonry with 2 coats of an epoxy coating and installation of a larger window unit and new caulk;

¹ The plan was prepared by Desmarais Environmental, Inc. on your behalf to satisfy the requirements under 40 CFR §§ 761.61(c), 761.62, and 761.79(h). Information was received dated February 9, 2010, July 20, 2010, and July 26, 2010 (Cleanup & Risk-Based Disposal Approval); November 30, 2010 (Response to Comments); December 9, 2010 (Response to Comments); and December 13, 2010 (clarification on encapsulation via e-mail). These submittals shall be referred to as the Notification.

- Implementation of long term maintenance and monitoring of the encapsulated areas and of indoor air; and,
- Recording of a deed notice to document the PCB concentrations at the Site and the long-term maintenance and monitoring requirements.

Based on the EPA's review, the information provided in the Notification meets the requirements under 40 CFR § 761.61, § 761.62, and § 761.79(h) for cleanup and disposal of PCB wastes. EPA finds that the proposed encapsulation of PCB-contaminated concrete with a coating and the additional window frame barrier should effectively prevent direct exposure of these PCB-contaminated surfaces to building users. As such, EPA may approve this cleanup and disposal approach under § 761.61(c).

UNH may proceed with its project in accordance with 40 CFR § 761.61(c); § 761.62; § 761.79(h); its Notification; and this Approval, subject to the conditions of Attachment 1.

Please note that EPA is requiring UNH to conduct sampling of the masonry surface prior to encapsulation and post-encapsulation in order to evaluate the effectiveness of the encapsulation and the initial abatement work (see Attachment 1, Condition 14). Under this Approval, EPA is reserving its right to require additional investigation or mitigation measures should the results of the initial abatement work or the long-term monitoring results indicate that an unreasonable risk to building users remains following the abatement activities.

Please be aware that this Approval requires UNH to conduct outreach activities for the Site users concerning the PCB remediation work. Documentation of the outreach effort shall be submitted to EPA. (Attachment 1, Approval Condition 12).

In the event that UNH identifies other PCB contamination subject to cleanup and disposal under the PCB regulations, UNH will be required to notify EPA and cleanup the PCB-contaminated wastes in accordance with 40 CFR Part 761 (see Attachment 1, Condition 1).

This Approval does not release UNH from any applicable requirements of federal, state or local law, including the requirements related to cleanup and disposal of PCB-contaminated wastes under the New Hampshire Department of Environmental Service (NHDES) regulations.

Questions and correspondence on this Approval should be directed to:


Kimberly N. Tisa, PCB Coordinator
United States Environmental Protection Agency
5 Post Office Square, Suite 100 (OSRR07-2)
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527
Facsimile: (617) 918-0527

EPA shall not consider this project complete until it has received all submittals required under this Approval. Please be aware that upon EPA receipt and review of the submittals, EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,

A handwritten signature in dark ink, appearing to read "James T. Owens, III", is written over the printed name and title.

James T. Owens, III, Director
Office of Site Remediation & Restoration

cc: R. Desmarais, Desmarais Environmental
K. DuBois, NHDES
 File

Attachment 1

ATTACHMENT 1: PCB RISK-BASED APPROVAL CONDITIONS
UNIVERSITY OF NEW HAMPSHIRE FIELD HOUSE
145 MAIN STREET
DURHAM, NEW HAMPSHIRE

GENERAL CONDITIONS

1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to the *PCB bulk product waste* and the *PCB remediation waste* located at the University of New Hampshire (UNH) Field House as identified in the Notification.
 - a. In the event that UNH identifies other PCB-contaminated wastes subject to cleanup and disposal under the PCB regulations, UNH will be required to notify EPA and clean up the PCB-contaminated wastes in accordance with 40 CFR Part 761.
2. UNH shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.
3. In the event that the cleanup plan described in the Notification differs from the conditions specified in this Approval, the conditions of this Approval shall govern.
4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.
5. UNH must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during implementation of these cleanup activities, UNH shall contact EPA within 24 hours for direction on PCB cleanup and sampling requirements.
6. UNH is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time UNH has or receives information indicating that UNH or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within 24 hours of having or receiving the information.
7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by UNH are authorized to conduct the activities set forth in the Notification. UNH is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.

8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release UNH from compliance with any applicable requirements of federal, state or local law; or 3) release UNH from liability for, or otherwise resolve, any violations of federal, state or local law.

NOTIFICATION AND CERTIFICATION CONDITIONS

9. This Approval may be revoked if the EPA does not receive written notification from UNH of its acceptance of the conditions of this Approval within 10 business days of receipt.
10. UNH shall notify EPA in writing of the scheduled date of commencement of on-site activities at least 1 business day prior to conducting any work under this Approval.
11. Prior to initiating onsite work under this Approval, UNH shall submit the following information for EPA review and/or approval:
 - a. a certification signed by its selected abatement contractor, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval;
 - b. a certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the sample extraction and analysis requirements, and the quality assurance requirements specified in the Notification and in this Approval; and,
 - c. A contractor work plan, prepared and submitted by the selected contractor(s), detailing the procedures that will be employed for removal of PCB-contaminated materials and for containment and air monitoring during removal activities. This work plan should also include information on waste storage, handling, and disposal for each waste stream type and for equipment decontamination.

CLEANUP AND DISPOSAL CONDITIONS

12. UNH shall conduct outreach activities for the Field House users on the PCB remediation work. UNH shall submit information on its outreach activities within 30 days of receipt of this Approval.

13. To the maximum extent practical, engineering controls, such as barriers, and removal techniques, such as the use of HEPA ventilated tools, shall be utilized during removal processes. In addition, to the maximum extent possible, disposable equipment and materials, including PPE, will be used to reduce the amount of decontamination necessary.
14. PCB-contaminated materials shall be removed and/or decontaminated, and sampling and analysis shall be conducted as described below:
 - a. All visible caulk shall be removed. Following removal of the caulk but **prior to** encapsulation, sampling of the surrounding *porous surfaces* (i.e. concrete/masonry) shall be conducted as follows:
 - i) A minimum of 5 window locations shall be sampled to determine the PCB concentration remaining in the masonry. Samples shall be collected according to EPA's *draft Standard Operating Procedure For Sampling Concrete in the Field*, dated 12/30/97 to a maximum depth interval of 0.5 inches.
 - ii) Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846 and chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another method(s) is validated according to Subpart Q.
 - b. Following encapsulation of PCB-contaminated *porous surfaces*, post-abatement sampling shall be conducted to determine the impact of the cleanup and disposal activities:
 - i) Wipe sampling of the encapsulated *porous surfaces* shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e. $\mu\text{g}/100\text{ cm}^2$). A minimum of 5 window locations shall be sampled. Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846 and chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another method(s) is validated according to Subpart Q.
 - ii) Indoor air sampling shall be conducted in accordance with EPA Method TO-10A or EPA Method TO-4A. Sufficient sample volumes shall be collected to provide a laboratory reporting limit of less than or equal to (\leq) $0.050\text{ }\mu\text{g}/\text{m}^3$. PCB analysis shall be conducted for PCB homologues and/or PCB congeners by EPA Method 680 or EPA Method 1668.

- iii) In the event that PCB concentrations in the wipe samples are greater than ($>$) $1 \mu\text{g}/100 \text{ cm}^2$ or air sample results are $> 0.050 \mu\text{g}/\text{m}^3$, UNH shall contact EPA for further discussion and direction on alternatives.
 - c. UNH shall submit a monitoring and maintenance implementation plan (MMIP) to monitor the long-term effectiveness of the encapsulants and other barriers in reducing exposure to building users (see Condition 15).
15. PCB waste (at any concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with 40 CFR § 761.40; stored in a manner consistent with 40 CFR § 761.65; and, disposed of in accordance with 40 CFR § 761.61 or § 761.62, unless otherwise specified below.
- a. Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g)(6).
 - b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).
 - c. PCB-contaminated water generated during decontamination shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60.

INSPECTION, MONITORING, MODIFICATION AND REVOCATION CONDITIONS

16. Within 120 days of completion of the work authorized under this Approval, UNH shall submit for EPA's review and approval, a detailed MMIP for the surface coating(s)/barriers and for indoor air. UNH shall incorporate any changes to the MMIP required by EPA.
- a. The MMIP shall include: a description of the activities that will be conducted, including inspection criteria, frequency, and routine maintenance activities; sampling protocols, sampling frequency, and analytical criteria; and reporting requirements.
 - b. The MMIP shall include a communications component which details how the maintenance and monitoring results will be communicated to the Site users, other on-site workers, and interested stakeholders.

- c. The MMIP shall include a worker training component for maintenance workers or for any person that will be conducting work that could impact the building coatings/barriers.
 - d. UNH shall submit the results of these long-term monitoring and maintenance activities to EPA. Based on its review of the results, EPA may determine that modification to the MMIP is necessary in order to monitor and/or evaluate the long-term effectiveness of the coatings/barriers.
 - e. Activities required under the MMIP shall be conducted until such time that EPA determines, in writing, that such activities are no longer necessary.
17. UNH shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by UNH to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.
18. Any proposed modification(s) in the plan, specifications, or information in the Notification must be submitted to EPA for review and approval. Any proposed modification(s) in the plan or specifications contained in the Notification or any departure from the conditions of this Approval without prior, written authorization from the EPA may result in the revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.
19. Any misrepresentation or omission of any material fact in the Notification or in any records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.

RECORDKEEPING AND REPORTING CONDITIONS

20. UNH shall prepare and maintain all records and documents required by 40 CFR Part 761, including but not limited to the records required under Subparts J and K. A written record of the cleanup and disposal activities and the analytical sampling shall be established and maintained by UNH in one centralized location, until such time as EPA approves in writing a request for an alternative disposition of such records. All records shall be made available for inspection to authorized representatives of EPA.
21. As required under Condition 16 of this Approval, UNH shall submit the results of the long-term monitoring and maintenance activities to EPA as specified in the final MMIP to be approved by EPA.

22. UNH shall submit a Final Completion Report (Report) to the EPA within 120 days of completion of the activities authorized under this Approval. At a minimum, this Report shall include: a discussion of the project activities, including any modifications that were made to the cleanup plan; characterization and post-abatement sampling analytical results; copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCBs removed and disposed off-site; copies of manifests and/or bills of lading; and, copies of certificates of disposal or similar certifications issued by the disposer, if applicable. The Report shall also include a copy of the recorded deed restriction and a certification signed by a UNH official verifying that the authorized activities have been implemented in accordance with this Approval and the Notification.
23. Required submittals shall be mailed to:
- Kimberly N. Tisa, PCB Coordinator
United States Environmental Protection Agency
5 Post Office Square, Suite 100 (OSRR07-2)
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527
Facsimile: (617) 918-0527
24. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self-disclosure or penalty policies.

END OF ATTACHMENT 1

